```
C:\Program Files\Stnexp\Queries\09828317.str
                                                              Brook Duery
                                                                                                  [19]<sub>0-[</sub>20]<sub>0-1</sub>21
chain nodes : 19 20 21 29
```

```
ring nodes:
    1 2 3 4 5 6 7 8 9 10 11 12 13 14
chain bonds:
    5-19 12-29 19-20 20-21
ring bonds:
    1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-11 8-9 9-10 10-11 10-12 11-14 12-13 13-14
exact/norm bonds:
    1-2 1-6 2-3 3-4 4-5 5-6 5-19 7-8 7-11 8-9 9-10 10-11 10-12 11-14 12-13
12-29 13-14 19-20 20-21
isolated ring systems:
    containing 1: 7:

G2:C,O,S
G3:C,S
G4:O,N
Match level:
```

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 12:Atom 13:Atom 14:Atom 18:CLASS 19:CLASS 20:CLASS 21:Atom 29:Atom

: Unsaturated

Generic attributes :

Saturation

21:

=> s 15

L6 7 L5

=> d 16 1-7 bib abs hitstr

```
ANSWER 1 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN
L6
AN
     2001:763004 CAPLUS
DN
     135:303919
     Preparation of polyazamacrocyclic compounds as inhibitors of
TI
    prenyl-protein transferase
     Stump, Craiq A.; Williams, Theresa M.; Nquyen, Diem N.
IN
PA
    Merck & Co., Inc., USA
SO
     PCT Int. Appl., 173 pp.
     CODEN: PIXXD2
     Patent
DT
LΑ
     English
FAN.CNT 1
     PATENT NO.
                      KIND
                            DATE
                                           APPLICATION NO.
                            20011018
PΙ
     WO 2001077116
                       A1
                                           WO 2001-US11397 20010406
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM,
             HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
             YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     US 2002123497
                       A1
                            20020905
                                           US 2001-828259
                                                             20010406
     US 6534506
                       B2
                            20030318
PRAI US 2000-195951P
                            20000410
                       Þ
OS
     MARPAT 135:303919
GΙ
```

AB Title compds., prenyl-protein transferase inhibitors, [I, II; X = S, CH2; X1 = CH2, SO2; R = O, H2; R1 = O, H2; R2 = Br, H, Cl], pharmaceutically acceptable salts, and stereoisomers are prepared Title compds. I and II inhibit the prenylation of the oncogene protein Ras. Title invention is further directed to chemotherapeutic compns. containing the compds. of this invention and methods for inhibiting prenyl-protein transferase and the prenylation of the oncogene protein Ras. Thus, the title compound I (X1 = S; X2 = NH; X3 = CH2; R = O; R1 = O; R2 = Br) was prepared and in vitro farnesyl-protein transferase inhibitory activity and antitumor activity tested.

IT 367268-82-4P 367268-86-8P 367268-89-1P 367268-95-9P 367269-02-1P 367269-03-2P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)

(Preparation of polyazamacrocyclic compds. as inhibitors of prenyl-protein transferase)

RN 367268-82-4 CAPLUS

CN Piperazinone, 1-[[2-bromo-5-[[(1,1-dimethylethyl)diphenylsilyl]oxy]phenyl} methyl]-4-[[3-(4-cyano-3-fluorophenyl)-2,3-dihydroimidazo[2,1-b]thiazol-5-yl]carbonyl]- (9CI) (CA INDEX NAME)

RN 367268-86-8 CAPLUS

CN Piperazinone, 1-[[2-chloro-5-[[(1,1-dimethylethyl)diphenylsilyl]oxy]phenyl | methyl]-4-[[5-(4-cyano-3-fluorophenyl)-6,7-dihydro-5H-pyrrolo[1,2-a]imidazol-3-yl]carbonyl]- (9CI) (CA INDEX NAME)

NC N 
$$O$$
 N  $CH_2$   $O$  Ph  $C-Bu-Si-O$  Ph

RN 367268-89-1 CAPLUS

CN Piperazinone, 4-[[5-(4-cyano-3-fluorophenyl)-6,7-dihydro-5H-pyrrolo[1,2-a]imidazol-3-yl]carbonyl]-1-[7-[(methylsulfonyl)oxy]-1-naphthalenyl]-(9CI) (CA INDEX NAME)

RN 367268-95-9 CAPLUS

CN Piperazinone, 4-[[3-(4-cyano-3-fluorophenyl)-2,3-dihydroimidazo[2,1-

b]thiazol-5-yl]carbonyl]-1-[3'-[[(1,1-dimethylethyl)dimethylsilyl]oxy][1,1'-biphenyl]-2-yl]- (9CI) (CA INDEX NAME)

RN 367269-02-1 CAPLUS

CN Piperazinone, 4-[[3-(4-cyano-3-fluorophenyl)-2,3-dihydroimidazo[2,1-b]thiazol-5-yl]carbonyl]-1-[[5-[[(1,1-dimethylethyl)diphenylsilyl]oxy]-2-fluorophenyl]methyl]-, hydrochloride (9CI) (CA INDEX NAME)

# ●x HCl

RN 367269-03-2 CAPLUS

CN Piperazinone, 1-[[2-chloro-5-[[(1,1-dimethylethyl)diphenylsilyl]oxy]phenyl | methyl]-4-[[(3R)-3-(4-cyano-3-fluorophenyl)-2,3-dihydroimidazo[2,1-b]thiazol-5-yl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

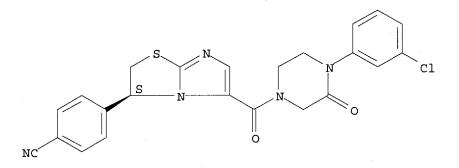
RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
ANSWER 2 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN
L6
AN
     2001:762874 CAPLUS
DN
     135:335140
TΙ
     Inhibitors of prenyl-protein transferase
     Stump, Craig A.; Williams, Theresa M.
IN
     Merck & Co., Inc., USA
PA
     PCT Int. Appl., 148 pp.
SO
     CODEN: PIXXD2
DT
     Patent
T.A
     English
FAN.CNT 1
     PATENT NO.
                      KIND DATE
                                           APPLICATION NO.
     WO 2001076693
                      A1
                            20011018
                                           WO 2001-US11390 20010406
ΡI
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM,
             HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
             YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                      P
                            20000410
PRAI US 2000-195802P
     MARPAT 135:335140
OS
     The present invention is directed to peptidomimetic compds. that inhibit
ΑB
     prenyl-protein transferase and the prenylation of the oncogene protein
     Ras. The invention is further directed to chemotherapeutic compns. containing
     the compds. of this invention and methods for inhibiting prenyl-protein
     transferase and the prenylation of the oncogene protein Ras.
TI
     367910-69-8P
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); PEP (Physical, engineering or chemical process); SPN
     (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study);
     PREP (Preparation); PROC (Process); USES (Uses)
        (inhibitors of prenyl-protein transferase and prenylation of Ras
        oncogene protein)
RN
     367910-69-8 CAPLUS
CN
     Piperazinone, 1-(3-chlorophenyl)-4-[[(3S)-3-(4-cyanophenyl)-2,3-
     dihydroimidazo[2,1-b]thiazol-5-yl]carbonyl]-, monohydrochloride (9CI)
```

Absolute stereochemistry.

INDEX NAME)



```
367910-46-1P 367910-47-2P 367910-48-3P
IT
     367910-49-4P 367910-50-7P 367910-51-8P
     367910-52-9P 367910-53-0P 367910-54-1P
     367910-55-2P 367910-56-3P 367910-57-4P
     367910-58-5P 367910-59-6P 367910-60-9P
     367910-61-0P 367910-62-1P 367910-63-2P
     367910-64-3P 367910-70-1P 367910-72-3P
     367910-73-4P 367910-74-5P 367910-76-7P
     367910-77-8P 367910-79-0P 367910-80-3P
     367910-81-4P 367910-89-2P 367910-90-5P
     367911-07-7P 367911-16-8P 367911-23-7P
     367911-24-8P
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
     BIOL (Biological study); PREP (Preparation); USES (Uses)
        (inhibitors of prenyl-protein transferase and prenylation of Ras
        oncogene protein)
RN
     367910-46-1 CAPLUS
     Piperazinone, 1-(3-chlorophenyl)-4-[[(3R)-3-(4-cyanophenyl)-2,3-
CN
     dihydroimidazo[2,1-b]thiazol-5-yl]carbonyl]- (9CI) (CA INDEX NAME)
```

Absolute stereochemistry.

RN 367910-47-2 CAPLUS
CN Piperazinone, 1-(3-chlorophenyl)-4-[[(3S)-3-(4-cyanophenyl)-2,3-dihydroimidazo[2,1-b]thiazol-5-yl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 367910-48-3 CAPLUS
CN Benzonitrile, 4-[5-[[4-(3-chlorophenyl)-3-oxo-1-piperazinyl]methyl]-2,3-dihydroimidazo[2,1-b]thiazol-3-yl]- (9CI) (CA INDEX NAME)

RN 367910-49-4 CAPLUS

CN Piperazinone, 1-(3-chlorophenyl)-4-[[3-(4-cyanophenyl)-2,3-dihydroimidazo[2,1-b]thiazol-5-yl]carbonyl]- (9CI) (CA INDEX NAME)

RN 367910-50-7 CAPLUS

CN Piperazinone, 5-butyl-4-[[(3R)-3-(4-cyanophenyl)-2,3-dihydroimidazo[2,1-b]thiazol-5-yl]carbonyl]-1-(3-methoxyphenyl)-, (5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 367910-51-8 CAPLUS

CN Piperazinone, 5-butyl-4-[[(3S)-3-(4-cyanophenyl)-2,3-dihydroimidazo[2,1-b]thiazol-5-yl]carbonyl]-1-(3-methoxyphenyl)-, (5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 367910-52-9 CAPLUS

CN Piperazinone, 4-[[(3R)-3-(4-cyanophenyl)-2,3-dihydroimidazo[2,1-b]thiazol-5-yl]carbonyl]-1-(3-methoxyphenyl)-5-(2-thienylmethyl)-, (5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 367910-53-0 CAPLUS

CN Piperazinone, 4-[[(3S)-3-(4-cyanophenyl)-2,3-dihydroimidazo[2,1-b]thiazol-5-yl]carbonyl]-1-(3-methoxyphenyl)-5-(2-thienylmethyl)-, (5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 367910-54-1 CAPLUS

CN Piperazinone, 1-(3-chlorophenyl)-4-[[(3R)-3-(4-cyanophenyl)-2,3-dihydro-1-oxidoimidazo[2,1-b]thiazol-5-yl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 367910-55-2 CAPLUS

CN Piperazinone, 1-(3-chlorophenyl)-4-[[(3S)-3-(4-cyanophenyl)-2,3-dihydro-1-oxidoimidazo[2,1-b]thiazol-5-yl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 367910-56-3 CAPLUS

CN Piperazinone, 1-(3-chlorophenyl)-4-[[(3R)-3-(4-cyanophenyl)-2,3-dihydro-1,1-dioxidoimidazo[2,1-b]thiazol-5-yl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 367910-57-4 CAPLUS

CN Piperazinone, 1-(3-chlorophenyl)-4-[[(3S)-3-(4-cyanophenyl)-2,3-dihydro-1,1-dioxidoimidazo[2,1-b]thiazol-5-yl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 367910-58-5 CAPLUS

CN Benzonitrile, 4-[3-[[4-(3-chlorophenyl)-3-oxo-1-piperazinyl]methyl]-5,6,7,8-tetrahydroimidazo[1,2-a]pyridin-5-yl]- (9CI) (CA INDEX NAME)

RN 367910-59-6 CAPLUS

CN Piperazinone, 1-(3-chlorophenyl)-4-[[(5R)-5-(4-cyanophenyl)-6,7-dihydro-5H-pyrrolo[1,2-a]imidazol-3-yl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 367910-60-9 CAPLUS

CN Piperazinone, 1-(3-chlorophenyl)-4-[[(5S)-5-(4-cyanophenyl)-6,7-dihydro-5H-pyrrolo[1,2-a]imidazol-3-yl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 367910-61-0 CAPLUS

CN Piperazinone, 1-(3-chlorophenyl)-4-[[3-(4-cyanophenyl)-2,3-dihydro-3-methylimidazo[2,1-b]thiazol-5-yl]carbonyl]- (9CI) (CA INDEX NAME)

RN 367910-62-1 CAPLUS

CN Piperazinone, 1-[[2-bromo-5-(2-propenyloxy)phenyl]methyl]-4-[[3-(4-cyanophenyl)-2,3-dihydroimidazo[2,1-b]thiazol-5-yl]carbonyl]- (9CI) (CA INDEX NAME)

RN 367910-63-2 CAPLUS

CN Piperazinone, 1-[(2-chloro-5-hydroxyphenyl)methyl]-4-[[5-(4-cyano-3-fluorophenyl)-6,7-dihydro-5H-pyrrolo[1,2-a]imidazol-3-yl]carbonyl]- (9CI) (CA INDEX NAME)

RN 367910-64-3 CAPLUS

CN Piperazinone, 1-(3-chlorophenyl)-4-[[(3R)-3-(4-cyanophenyl)-2,3-dihydroimidazo[2,1-b]thiazol-5-yl]carbonyl]-, hydrochloride (5:8) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

## ●8/5 HCl

RN 367910-70-1 CAPLUS

CN Benzonitrile, 4-[5-[[4-(3-chlorophenyl)-3-oxo-1-piperazinyl]methyl]-2,3-dihydroimidazo[2,1-b]thiazol-3-yl]-, dihydrochloride (9CI) (CA INDEX NAME)

## ●2 HCl

RN 367910-72-3 CAPLUS

CN Piperazine, 1-(3-chlorophenyl)-4-[[3-(4-cyanophenyl)-2,3-dihydroimidazo[2,1-b]thiazol-5-yl]carbonyl]-, dihydrochloride (9CI) (CA INDEX NAME)

●2 HCl

RN 367910-73-4 CAPLUS

CN Piperazinone, 5-butyl-4-[[(3R)-3-(4-cyanophenyl)-2,3-dihydroimidazo[2,1-b]thiazol-5-yl]carbonyl]-1-(3-methoxyphenyl)-, hydrochloride (5:9), (5S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

# ●9/5 HCl

RN 367910-74-5 CAPLUS

CN Piperazinone, 5-butyl-4-[[(3S)-3-(4-cyanophenyl)-2,3-dihydroimidazo[2,1-b]thiazol-5-yl]carbonyl]-1-(3-methoxyphenyl)-, hydrochloride (5:8), (5S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

### ●8/5 HCl

RN 367910-76-7 CAPLUS

CN Piperazinone, 4-[[(3R)-3-(4-cyanophenyl)-2,3-dihydroimidazo[2,1-b]thiazol-5-yl]carbonyl]-1-(3-methoxyphenyl)-5-(2-thienylmethyl)-, hydrochloride (5:7), (5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

# ●7/5 HCl

367910-77-8 CAPLUS RN

Piperazinone, 4-[[(3S)-3-(4-cyanophenyl)-2,3-dihydroimidazo[2,1-b]thiazol-5-yl]carbonyl]-1-(3-methoxyphenyl)-5-(2-thienylmethyl)-, hydrochloride (5:8), (5S)- (9CI) (CA INDEX NAME) CN

Absolute stereochemistry.

## ●8/5 HCl

RN

367910-79-0 CAPLUS
Piperazinone, 1-(3-chlorophenyl)-4-[[3-(4-cyanophenyl)-2,3-dihydro-1-oxidoimidazo[2,1-b]thiazol-5-yl]carbonyl]-, monohydrochloride (9CI) (CA CNINDEX NAME)

#### HC1

367910-80-3 CAPLUS RN

Piperazinone, 1-(3-chlorophenyl)-4-[[3-(4-cyanophenyl)-2,3-dihydro-1,1-CNdioxidoimidazo[2,1-b]thiazol-5-yl]carbonyl]-, monohydrochloride (9CI) (CA INDEX NAME)

# ● HCl

RN 367910-81-4 CAPLUS Benzonitrile, 4-[3-[[4-(3-chlorophenyl)-3-oxo-1-piperazinyl]methyl]-CN

5,6,7,8-tetrahydroimidazo[1,2-a]pyridin-5-yl]-, dihydrochloride (9CI) (CA INDEX NAME)

## 2 HCl

RN 367910-89-2 CAPLUS

Piperazinone, 1-(3-chlorophenyl)-4-[[(5R)-5-(4-cyanophenyl)-6,7-dihydro-5H-CNpyrrolo[1,2-a]imidazol-3-yl]carbonyl]-, dihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

## HCl

RN367910-90-5 CAPLUS

Piperazinone, 1-(3-chlorophenyl)-4-[[(5S)-5-(4-cyanophenyl)-6,7-dihydro-5H-pyrrolo[1,2-a]imidazol-3-yl]carbonyl]-, dihydrochloride (9CI) (CA INDEX CNNAME)

Absolute stereochemistry.

# 2 HCl

RN

367911-07-7 CAPLUS
Piperazinone, 1-(3-chlorophenyl)-4-[[3-(4-cyanophenyl)-2,3-dihydro-3-methylimidazo[2,1-b]thiazol-5-yl]carbonyl]-, hydrochloride (4:7) (9CI) CN(CA INDEX NAME)

## ●7/4 HCl

RN 367911-16-8 CAPLUS

CN Piperazinone, 1-[[2-bromo-5-(2-propenyloxy)phenyl]methyl]-4-[[3-(4-cyanophenyl)-2,3-dihydroimidazo[2,1-b]thiazol-5-yl]carbonyl]-, hydrochloride (4:5) (9CI) (CA INDEX NAME)

## ●5/4 HCl

RN 367911-23-7 CAPLUS

CN Piperazinone, 1-[(2-chloro-5-hydroxyphenyl)methyl]-4-[[5-(4-cyano-3-fluorophenyl)-6,7-dihydro-5H-pyrrolo[1,2-a]imidazol-3-yl]carbonyl]-, trihydrochloride (9CI) (CA INDEX NAME)

# ●3 HCl

RN 367911-24-8 CAPLUS

CN Piperazinone, 1-(3-chlorophenyl)-4-[[(1R,3S)-3-(4-cyanophenyl)-2,3-dihydro-1-oxidoimidazo[2,1-b]thiazol-5-yl]carbonyl]-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

IT 367910-68-7P 367910-88-1P 367911-05-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(inhibitors of prenyl-protein transferase and prenylation of Ras oncogene protein)

RN 367910-68-7 CAPLUS

CN Piperazinone, 1-(3-chlorophenyl)-4-[[3-(4-cyanophenyl)-2,3-dihydroimidazo[2,1-b]thiazol-5-yl]carbonyl]-, hydrochloride (5:8) (9CI) (CA INDEX NAME)

# ●8/5 HCl

RN 367910-88-1 CAPLUS

CN Benzonitrile, 4-[3-[[4-(3-chlorophenyl)-3-oxo-1-piperazinyl]methyl]-5,6,7,8-tetrahydro-8-hydroxyimidazo[1,2-a]pyridin-5-yl]- (9CI) (CA INDEX NAME)

RN 367911-05-5 CAPLUS

CN Piperazinone, 1-(3-chlorophenyl)-4-[[5-(4-cyanophenyl)-6,7-dihydro-5H-pyrrolo[1,2-a]imidazol-3-yl]carbonyl]- (9CI) (CA INDEX NAME)

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1998:752464 CAPLUS

DN 129:302640

TI 1,4-Diphenylimidazole-5-acetamide derivatives as GABAA agonists

IN George, Pascal; De Peretti, Daniele; Gibert, Jean Francois; Mangane, Michel; Roy, Jocelyne

PA Synthelabo S. A., Fr.

SO Fr. Demande, 17 pp. CODEN: FRXXBL

DT Patent

LA French

FAN.CNT 1

| FAN.CNT 1 |                  |      |          |                 |          |  |  |  |  |
|-----------|------------------|------|----------|-----------------|----------|--|--|--|--|
|           | PATENT NO.       | KIND | DATE     | APPLICATION NO. | DATE     |  |  |  |  |
|           |                  |      |          |                 |          |  |  |  |  |
| ΡI        | FR 2759698       | Al   | 19980821 | FR 1997-1992    | 19970220 |  |  |  |  |
|           | FR 2759698       | B1   | 19990319 |                 |          |  |  |  |  |
| PRAI      | FR 1997-1992     |      | 19970220 |                 |          |  |  |  |  |
| OS        | MARPAT 129:30264 | 0    |          |                 |          |  |  |  |  |
| GI        |                  |      |          |                 |          |  |  |  |  |

Ι

$$R^3$$
 $N$ 
 $CH_2$ 
 $CO-NR^1R^2$ 

AB Imidazoleacetamides I [R = H, Cl, F, Me, OMe; R1, R2 = H, alkyl; NR1R2 = pyrrolidino, 4-methylpiperazino, hexahydroazepino; R3 = H, Me; R4 = H, F, Me] were prepared for use as GABAA agonists in treatment of disorders in GABAergic transmission associated with the  $\alpha$ 1,  $\alpha$ 2, and  $\alpha$ 3 subtypes (no data). I are obtained by Raney Ni reduction of imidazobenzothiazoleacetamides or imidazobenzothiazineacetamides. Thus, 0.74 g I [R, R3, R4 = H, R1, R2 = Me] was obtained by Raney Ni reduction of 1.48 g 2-(4-chlorophenyl)-N,N-dimethylimidazo[2,1-b]benzothiazole-3-acetamide.

IT 147970-83-0

RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of 1,4-diphenylimidazole-5-acetamide derivs. as GABAA agonists)

RN 147970-83-0 CAPLUS

CN Piperazine, 1-methyl-4-[(2-phenylimidazo[2,1-b]benzothiazol-3-yl)acetyl]-(9CI) (CA INDEX NAME)

$$\begin{array}{c|c} S & N & Ph & 0 \\ \hline & N & CH_2 - C & N & \\ \hline & Me \end{array}$$

L6 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1993:408810 CAPLUS

DN 119:8810

TI Preparation of imidazo[2,1-b]benzothiazole-3-acetamides and their use as benzodiazepine type 1 and type 2 receptor antagonists. anticonvulsants, or anxiolytics

IN George, Pascal; De Peretti, Danielle; Gibert, Jean Francois; Mangane, Michel; Le Galloudec, Odette

PA Synthelabo S. A., Fr.

SO Eur. Pat. Appl., 25 pp. CODEN: EPXXDW

DT Patent

LA French

FAN.CNT 1

| FAN.C |     |      |          |      |            |       |      |    |      |            |    |        |     |   |    |
|-------|-----|------|----------|------|------------|-------|------|----|------|------------|----|--------|-----|---|----|
|       | PAT | ENT  | NO.      |      | KIND       | DATE  |      |    |      |            |    | DATE   |     |   |    |
| PΤ    | EP  | 5240 | ·<br>)55 |      | A1         | 19930 | 120  |    |      | <br>-40195 |    | 199207 | 08  |   |    |
|       |     |      |          |      |            |       |      |    |      |            |    | MC, N  |     |   | SE |
|       | FR  |      |          |      | A1         |       |      |    |      |            |    | 199107 |     | · |    |
|       |     |      |          |      | B1         |       |      |    |      |            |    |        |     |   |    |
|       |     |      |          |      | A1         |       | 122  | FR | 1991 | -9137      |    | 199107 | 19  |   |    |
|       |     |      |          |      | B1         |       | 114  |    |      |            |    |        |     |   |    |
|       | FR  | 2679 | 9233     |      | A1         | 19930 | 122  | FR | 1991 | -9138      |    | 199107 | 19  |   |    |
|       |     |      |          |      | B1         |       | .015 |    |      |            |    |        |     |   |    |
|       | FR  | 2679 | 9136     |      | A1         |       |      |    |      |            |    | 199107 |     |   |    |
|       | CA  | 2074 | 1112     |      | AA         | 19930 | 120  | CA | 1992 | -20741     | 12 | 199207 | 17  |   |    |
|       | NO  | 9202 | 2842     |      | A          |       |      |    |      | -2842      |    | 199207 |     |   |    |
|       | AU  | 9220 | 380      |      | <b>A</b> 1 | 19930 | 121  | AU | 1992 | -20380     | ١  | 199207 | 117 |   |    |
|       | ΑU  | 6465 | 582      |      | B2         |       |      |    |      |            |    |        |     |   |    |
|       | CN  | 1068 | 3826     |      | Α          | 19930 | 210  | CN | 1992 | -10576     | 9  | 199207 | 717 |   |    |
|       | ZA  | 9205 | 5388     |      | - A        | 19930 | 1428 | ZA | 1992 | -5388      |    | 199207 | 717 |   |    |
|       | JP  | 0520 | )2063    |      | A2         | 19930 | 810  | JP | 1992 | -19055     | 1  | 199207 | 717 |   |    |
| PRAI  | FR  | 1993 | 1-9136   | 5    |            | 19910 | 719  |    |      |            |    |        |     |   |    |
|       | FR  | 199  | 1-913    | 7    |            | 19910 | 719  |    |      |            |    |        |     |   |    |
|       | FR  | 1993 | 1-9138   | В    |            | 19910 | 719  |    |      |            |    |        |     |   |    |
|       | FR  | 1993 | 1-9139   | 9    |            | 1991  | 719  |    |      |            |    |        |     |   |    |
| OS    | MAI | RPAT | 119:8    | 8810 |            |       |      |    |      |            |    |        |     |   |    |
| GI    |     |      |          |      |            |       |      |    |      |            |    |        |     |   |    |

Ι

AB Title compds. I [X = H, halo, Me, Et, Pr, MeO, EtO, MeS, MeSO2, cyano, aminocarbonyl; R1 = H, C1-4 alkyl; R2 = H, linear, branched or cyclic C1-5 alkyl, possibly substituted by one or more F atoms, by MeO, Me2N, a Ph group, 2-propenyl, 2-propynyl; R1R2N = pyrrolidino, piperidino, hexahydroazepin-1-yl, 4-(phenylmethyl)piperidino, 4-methylpiperazino, 4-(phenylmethyl)piperazino, morpholino, thiomorpholino] are prepared by a process in which an imidazo[2,1-b]benzothiazole is reacted with glyoxylic

acid in protic solvent to give an  $\alpha\textsc{-hydroxyacetic}$  acid derivative which is O-acetylated, treated with N,N'-carbonyldimidazole, then amidated with HNR1R2 to give an  $\alpha\textsc{-hydroxyacetamide}$ ; this is substituted at the OH position by halide, then treated with a hydridic reducing agent, e.g., Rongalite, to give compds. I. I exhibit antagonist activity to benzodiazepine type 1 and type 2 receptors in vivo and are anticonvulsants and anxiolytics.

IT 147970-83-0P 147970-84-1P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, as anticonvulsant or anxiolytic, and affinity of, for benzodiazepine type 1 and type 2 receptors)

RN 147970-83-0 CAPLUS

CN Piperazine, 1-methyl-4-[(2-phenylimidazo[2,1-b]benzothiazol-3-yl)acetyl]-(9CI) (CA INDEX NAME)

$$\begin{array}{c|c} S & N & Ph \\ \hline \\ CH_2 - C & N \\ \hline \\ Me \end{array}$$

RN 147970-84-1 CAPLUS

CN Piperazine, 1-[(2-phenylimidazo[2,1-b]benzothiazol-3-yl)acetyl]-4-(phenylmethyl)- (9CI) (CA INDEX NAME)

ANSWER 5 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN L6 1988:131817 CAPLUS ANDN 108:131817 Preparation of 5,6,7,8-tetrahydro-2-phenylimidazo[1,2-a]pyridine-3-TIacetamides as anticonvulsants and sedatives Pascal, George; Hong, Thu Nguyen IN Synthelabo S. A., Fr. PΑ Fr. Demande, 11 pp. SO CODEN: FRXXBL Patent DT French LA FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE \_\_\_\_\_\_ \_\_\_\_\_\_ FR 1986-1333 19860131 PΙ FR 2593817 A1 19870807 FR 2593817 19880415 19860131 PRAI FR 1986-1333 CASREACT 108:131817 O.S. GI

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\$$

The title compds. (I; R1, R2, Y = H, C1-4 alkyl; R1R2 = C3-6 alkylene, optionally with O or R1N interrupters; X = C1-4 alkyl, C1-4 alkoxy, halo) and their pharmaceutically acceptable acid salts were prepared as anticonvulsants and sedatives. 2-(4-Methoxyphenyl)imidazo[1,2-a]pyridine-3-acetamide was hydrogenated in HOAc over Pd/C to give, after acidification, I (R = R1 = Y = H, X = MeO).HCl. I inhibited Cardiazol-induced clonic convulsions in mice with ED50 of 0.5-30 mg/kg i.p. and had sedative activity in rats at 1-30 mg/kg.

IT 113468-12-5P 113468-13-6P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of, as anticonvulsant, anxiolytic, and sedative)

RN 113468-12-5 CAPLUS

CN Piperazine, 1-[[5,6,7,8-tetrahydro-6-methyl-2-(4-methylphenyl)imidazo[1,2-a]pyridin-3-yl]acetyl]-, hydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Me} \\ & \text{N} \\ & \text{CH}_2 - \text{C} \\ & \text{NH} \\ \end{array}$$

●x HCl

RN 113468-13-6 CAPLUS
CN Piperazine, 1-methyl-4-[[5,6,7,8-tetrahydro-6-methyl-2-(4-methylphenyl)imidazo[1,2-a]pyridin-3-yl]acetyl]- (9CI) (CA INDEX NAME)

ANSWER 6 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN L6 AN 1984:51510 CAPLUS 100:51510 DN Studies on the synthesis and antiinflammatory activity of TΙ 2,6-di-tert-butylphenols with a heterocyclic group at the 4-position. II Isomura, Yasuo; Ito, Noriki; Sakamoto, Shuichi; Homma, Hiroshige; Abe, ΑU Tetsushi; Kubo, Kazuo Cent. Res. Lab., Yamanouchi Pharm. Co., Ltd., Tokyo, 174, Japan CS Chemical & Pharmaceutical Bulletin (1983), 31(9), 3179-85 SO CODEN: CPBTAL; ISSN: 0009-2363 DTJournal English LA OS CASREACT 100:51510 GΙ

2,6-Di-tert-butylphenols with an imidazo[2,1-b]thiazole or 2,3-dihydroimidazo[2,1-b]thiazole group at the 4-position were prepared. Substituted were introduced at the 5-position of 6-(3,5-di-tert-butyl-4-hydroxyphenyl)-2,3-dihydroimidazo[2,1-b]thiazole (I, n = 0) by means of the Vilsmeier and Mannich reactions. I (n = 1, 2) were obtained by oxidation of I (n = 0). The above compds. were examined for antiinflammatory activity in adjuvant-induced arthritis in rats, and some compds. were further tested for activity in the carrageenin-induced rat paw edema assay and in the AcOH-induced writhing assay in mice. Some of the compds. showed potent anti-inflammatory and analgesic activities. The most potent compds., I (n = 1) (25 mg/kg, p.o., had about the same antiinflammatory activity as indomethacin (2 mg/kg, p.o.), but I (n = 1) (50 mg/kg, p.o.) had weaker analgesic activity than aminopyrine (50 mg/kg, p.o.).

IT 84217-97-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 84217-97-0 CAPLUS

CN Phenol, 4-[2,3-dihydro-5-[(4-methyl-1-piperazinyl)methyl]imidazo[2,1-b]thiazol-6-yl]-2,6-bis(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)

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ANSWER 7 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN
AN
    1983:53905 CAPLUS
DN
     3,5-Di-tert-butyl-4-hydroxyphenyl-substituted heterocyclic compounds
TI
     Kubo, Kazuo; Isomura, Yasuo; Sakamoto, Shuichi; Homma, Hiroshige
IN
     Yamanouchi Pharmaceutical Co., Ltd., Japan
PΑ
     Eur. Pat. Appl., 77 pp.
SO
     CODEN: EPXXDW
DT
    Patent
    English
LA
FAN.CNT 1
                     KIND DATE
                                         APPLICATION NO. DATE
     PATENT NO.
                           ______
                                          _____
PΙ
    EP 59090
                     A1
                           19820901
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                                                          19820219
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                      B1
                           19860129
        R: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE
                      A2 19820917
                                         JP 1981-23515
                                                          19810219
     JP 57150692
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                           19890821
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                                                          19810421
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                      B4 19920813
                                         JP 1981-157010
                                                          19811002
     JP 58057366
                      A2 19830405
                                         US 1982-347982
                                                          19820211
     US 4636516
                      A
                          19870113
                                         CA 1982-396506
     CA 1176260
                      A1 19841016
                                                          19820217
                      A1 19850115
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     ES 509778
                           19830116
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                                         ES 1982-509779
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                                          ES 1982-509781
                                                          19820219
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                                        EP 1985-200531
     EP 164765
                      A1
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                                                          19820219
         R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE
     AT 17721
                                          AT 1982-300861
                           19860215
                                                          19820219
                      E
PRAI JP 1981-23515
                           19810219
     JP 1981-59990
                           19810421
     JP 1981-157010
                           19811002
     EP 1982-300861
                           19820219
     CASREACT 98:53905
OS
GT
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AB 4,3,5-HO(Me3C)2C6H2R (R = imidazolyl, thiazolyl, oxazolyl, imidazothiazolyl) (.apprx.75 compds.) were prepared Thus 1.6 g 4,3,5-HO(Me3C)2C6H2COCHMeNH2 was treated with KNCO to give 0.7 g I. At 25 mg/kg day orally I had antiinflammatory activity against Mycobacterium butyricum-induced arthritis in rats.

IT 84217-97-0P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of) 84217-97-0 CAPLUS

RNPhenol, 4-[2,3-dihydro-5-[(4-methyl-1-piperazinyl)methyl]imidazo[2,1-b]thiazol-6-yl]-2,6-bis(1,1-dimethylethyl)- (9CI) (CA INDEX NAME) CN

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